Government of Karnataka

Form No PWG-45

Estimate Cost 98.00 Lakh

Modified Estimate for the work: Improvements to roads and Drains in Ward No 13 BBMP Dasarahalli

SLNo	Description of Work	Unit	As per Sanction Estimate			As per Tender			Total Executed	Qty Executed up to 125%			Qty Executed above 125%			Total Amount	Amount		Remarks
			Qty	Rate	Amount	Qty	Rate	Amount		Qty	Rate	Amount	Qty	Rate	Amount		Excess	Savings	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.	Cum	1266.12	137.80	174471.34	1266.12	143.24	181359.03	1233.37	1156.00	143.24	165585.44	0.00	0.00	0.00	165585.44		15773.59	
2	Removing & Refixing stone slabs of drains and pointing in C.M (1:3)	Sqm	95.40	111.30	10618.02	95.40	115.70	11037.78	173.93	119.25	115.70	13797.23	54.68	115.70	6326.48	20123.70	9085.92		
3	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications.	Cum	343.29	5509.33	1891297.90	343.29	5726.95	1966004.67	322.01	320.28	5726.95	1834227.55	0.00	0.00	0.00	1834227.55		131777.12	
4	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications	Cum	256.09	7189.42	1841138.57	256.09	7473.40	1913863.01	87.63	85.12	7473.40	636135.81	0.00	0.00	0.00	636135.81		1277727.20	
5	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification 28.8.2 -do- TMT Bars Fe 500	Ton	17.09	72326.98	1236068.09	17.09	75183.90	1284892.85	6.23	6.09	75183.90	457869.95	0.00	0.00	0.00	457869.95		827022.90	
6	Providing and fixing Precast RCC Cover slabs of 100 mm thick for drain in Cement concret 1:1.5:3 Using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work lift charges Curing and concrete finishing surface on both sides etc;. and complete as per the directions of Engineer in Charge.	Sqm	622.35	1615.00	1005095.25	622.35	1678.79	1044794.96	213.75	230.72	1678.79	387330.43	0.00	0.00	0.00	387330.43		657464.53	
7	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications.MORTH / Chapter 3	Sqm	775.20	95.40	73954.08	775.20	99.17	76876.58	2216.95	969.00	99.17	96095.73	1168.02	99.17	115832.54	211928.27	135051.69		

8	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202	Cum	46.20	952.94	44025.83	46.20	990.58	45764.80	62.78	55.53	990.58	55006.91	0.00	0.00	0.00	55006.91	9242.11		
9	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3	Sqm	1510.40	6.36	9606.14	1510.40	6.61	9983.74	2913.05	1888.00	6.61	12479.68	720.00	6.61	4759.20	17238.88	7255.14		
10	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406	Cum	226.56	2001.28	453410.00	226.56	2080.33	471319.56	467.18	283.20	2080.33	589149.46	179.55	2080.33	373523.25	962672.71	491353.14		
11	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). &= Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion,construction and longitudinal joints,including groove cutting charges, joint filler, soparation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum.	Cum	284.28	5354.02	1522040.81	284.28	5565.50	1582160.34	380.10	355.35	5565.50	1977700.43	37.25	5416.79	201775.43	2179475.85	597315.51		
12	KSRRB M100-1: Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1	Cum	1358.83	57.00	77453.31	1358.83	59.25	80510.68	1296.14	1211.53	59.25	71783.15	0.00	0.00	0.00	71783.15		8727.52	
13	KSRRB M 100-4.1. Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1	Cum	1358.83	25.60	34786.05	1358.83	26.61	36158.47	1296.14	1211.53	26.61	32238.81	0.00	0.00	0.00	32238.81		3919.65	
	Extra Item Rate List															0.00			

RIL 1	Providing and fixing Precast RCC Cover slabs of 250 mm thick for drain in Cement concret 1:1.5:3 Using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work lift charges Curing and concrete finishing surface on both sides etc;. and complete as per the directions of Engineer in Charge.	Sqm								47.07	5632.01	265098.71	0.00	0.00	0.00	265098.71	265098.71		
JL 2	KSRRB M500-6. Providing and applying primer coat with S.S.including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision	Sqm								1145.22	35.26	40380.46	0.00	0.00	0.00	40380.46	40380.46		
RIL 3	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and lalignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision	Cum								57.26	7580.87	434080.62	0.00	0.00	0.00	434080.62	434080.62		
ERIL 4	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision	Sqm								2532.58	13.22	33480.71	0.00	0.00	0.00	33480.71	33480.71		
ERIL 5	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.do - using 40-60 TPH capacity HMP with mechanical paver grading II(30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)	Cum								101.30	8882.17	899763.82	0.00	0.00	0.00	899763.82	899763.82		
	Total Construction cost				8374121.55			8704737.00				8002204.88			702216.90	**8704213.00**	2922107.83	2922412.51	

contrctor quoted 3.95 Above the S R Rate

1	**Estimate Amount**	**8374121.55**
2	**Tendor Amount**	**8704737.00**
3	**Actual Amount As per Modified Estimate Work (Slip+ ERIL)**	**8704213.00**
	Savings	**524.00**

Since the expendature is lesser than the Tender Amount,The work slip & ERIL may be approved

ಸಹಾಯಕ ಇಂಜಿನಿಯರ್
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.

Government of Karnataka

Form No PWG-45

Estimate Cost 98.00 Lakh

Modified Estimate for the work: Improvements to roads and Drains in Ward No 13 **BBMP Dasarahalli**

SLNo	Description of Work	Unit	As per Sanction Estimate			As per Tender			Total Executed	Qty Excecuted up to 125%			Qty Excecuted above 125%			Total Amount	Amount		Remarks
			Qty	Rate	Amount	Qty	Rate	Amount		Qty	Rate	Amount	Qty	Rate	Amount		Excess	Savings	
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3	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications.	Cum	343.29	5509.33	1891297.90	343.29	5726.95	1966004.67	322.01	320.28	5726.95	1834227.55	0.00	0.00	0.00	1834227.55		131777.12	
4	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.	Cum	256.09	7189.42	1841138.57	256.09	7473.40	1913863.01	87.63	85.12	7473.40	636135.81	0.00	0.00	0.00	636135.81		1277727.20	
5	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification 28.8.2 -do- TMT Bars Fe 500	Ton	17.09	72326.98	1236068.09	17.09	75183.90	1284892.85	6.23	6.09	75183.90	457869.95	0.00	0.00	0.00	457869.95		827022.90	
6	Providing and fixing Precast RCC Cover slabs of 100 mm thick for drain in Cement concret 1:1.5:3 Using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work lift charges Curing and concrete finishing surface on both sides etc;. and complete as per the directions of Engineer in Charge.	Sqm	622.35	1615.00	1005095.25	622.35	1678.79	1044794.96	213.75	230.72	1678.79	387330.43	0.00	0.00	0.00	387330.43		657464.53	
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8	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202	Cum	46.20	952.94	44025.83	46.20	990.58	45764.80	62.78	55.53	990.58	55006.91	0.00	0.00	0.00	55006.91	9242.11		
9	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3	Sqm	1510.40	6.36	9606.14	1510.40	6.61	9983.74	2913.05	1888.00	6.61	12479.68	720.00	6.61	4759.20	17238.88	7255.14		

10	~~KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406~~	Cum	226.56	2001.28	453410.00	226.56	2080.33	471319.56	467.18	283.20	2080.33	589149.46	179.55	2080.33	373523.25	962671.71	491353.14		
11	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). &= Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion,construction and longitudinal joints,including groove cutting charges, joint filler, soparation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum.	Cum	284.28	5354.02	1522040.81	284.28	5565.50	1582160.34	380.10	355.35	5565.50	1977700.43	37.25	5416.79	201775.43	2179475.85	597315.51		
12	KSRRB M100-1: Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1	Cum	1358.83	57.00	77453.31	1358.83	59.25	80510.68	1296.14	1211.53	59.25	71783.15	0.00	0.00	0.00	71783.15		8727.52	
13	KSRRB M 100-4.1. Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1	Cum	1358.83	25.60	34786.05	1358.83	26.61	36158.47	1296.14	1211.53	26.61	32238.81	0.00	0.00	0.00	32238.81		3919.65	
	Total Construction cost				8373965.37			8704726.46				6329400.56			702216.90	**7031617.46**	1249303.51	2922412.51	

contrctor quoted 3.95 Above the S R Rate

1 Work Silp Amount — 7031617.46
2 Tendor Amount — 8704737.00
3 Percrntage — 19.22 %

Assistant Engineer
Ward-13 Mallasandra

Assitant Executive Engineer
Shettyhalli Sub Division

Executive Engineer
Shettyhalli Division

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.

Work Slip is approved

Ley

Government of Karnataka
BBMP Dasarahalli
Estimate Cost 98.00 Lakh

Modified Estimate for the work: Improvements to roads and Drains in Ward No 13 **Job code 013-20-000022** ERIL

Name of the Contractor: M/s K B Constructions

SLNo	Description of Work	Unit	Aproximate Qty	Rate	Amount in Pupees	Wheather Item Altenate tonitemin the Tender or they are Additional Item (if in Lieu of the same Item in the accepted tender such items should be Mentioned)	wheather Extra item is included in the sanction estimate	How the extra cost of Items is proposed to be met	wheather Extra item is included in the Schedule of Rate of Division if Not Data Sheet should Accompany the Rate List	Remarks
ERIL 1	Providing and fixing Precast RCC Cover slabs of 250 mm thick for drain in Cement concret 1:1.5:3 Using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work lift charges Curing and concrete finishing surface on both sides etc;. and complete as per the directions of Engineer in Charge.	Sqm	47.07	5632.01	265098.71	Additional Work	Yes	Saving Amount in the Estimate	Yes	
ERIL 2	KSRRB M500-6. Providing and applying primer coat with S.S.including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision	Sqm	1145.22	35.26	40380.46	Additional Work	Yes	Saving Amount in the Estimate	Yes	
ERIL 3	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision	Cum	57.26	7580.87	434080.62	Additional Work	Yes	Saving Amount in the Estimate	Yes	
ERIL 4	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision	Sqm	2532.58	13.22	33480.71	Additional Work	Yes	Saving Amount in the Estimate	Yes	
ERIL 5	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.do - using 40-60 TPH capacity HMP with mechanical paver grading II(30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)	Cum	101.30	8882.17	899763.82	Additional Work	Yes	Saving Amount in the Estimate	Yes	
	Total Amount				1672804.31					

ERIL Amount 1672804.31 x1.1

Amount put to tender 8374121.55

Percentage Excess Over the Amount put to Tender = 19.97%

Assistant Engineer
Ward-13 Mallasandra

Assitant Executive Engineer
Shettyhalli Sub Division

ERIL in appny

Executive Engineer
Dasarahalli Division

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.